

Editorials and Association Notes

The Manitoba Medical Review

ESTABLISHED 1921

WINNIPEG, JUNE, 1940

Published Monthly by the

MANITOBA MEDICAL ASSOCIATION

Canadian Medical Association, Manitoba Division

Editorial Office

102 MEDICAL ARTS BUILDING, WINNIPEG

Editor

F. G. ALLISON, B.A., M.D. (Man.), M.R.C.P. (Lond.)

Editorial Committee

F. G. ALLISON, B.A., M.D. (Man.), M.R.C.P. (Lond.)

R. B. MITCHELL, B.A., M.D., C.M. (Man.), F.R.C.P. (C.)

J. D. ADAMSON, B.A., M.D. (Man.), M.R.C.P. (Edin.),

F.R.C.P. (C.)

Business Manager

J. GORDON WHITLEY

Annual Subscription - \$2.00

Editorial or other opinion expressed in this Review is not necessarily sanctioned by the Manitoba Medical Association

Welcome to the New Editor

The exigencies of war have compelled the resignation of the former editor of the Manitoba Medical Review. Dr. Clarence MacCharles, who served the medical profession of Manitoba in this capacity from 1932 to 1940 with credit, has joined the Royal Canadian Navy and has been transferred to the Pacific Coast. Long thought to be a confirmed bachelor, he confounded his friends by capturing, just before his departure, one of the fairest and brightest members of the instructing staff of the Winnipeg General Hospital Training School for Nurses, in the person of Miss Evelyn Smith, R.N., and taking her with him to the West. To the young couple we extend our heartiest greetings for continued happiness.

But the *Review* must go on, and the Executive Committee of the Manitoba Medical Association has been fortunate to secure Dr. F. Gerard Allison in his stead. If heredity counts for anything, Dr. Allison comes well prepared, for his father, W. T. Allison, Ph.D., was for many years Professor of English in the University of Manitoba, and was known to an even wider circle through his newspaper and radio book reviews.

The new editor has ideas regarding his duties which promise to make the *Review* even more widely read, and we are confident that he will add new lustre to the publication which has already passed through its infancy and childhood and before long will celebrate its majority. Kind reader, we present Dr. Gerard Allison to your tender mercies.

—ROSS MITCHELL, M.D.

Firefighters' Medical Service

Last August representatives of the three hundred Winnipeg Firemen approached the Manitoba Medical Association requesting consideration of a co-operative medical service scheme for themselves and their dependents. After six months' hard work by the Committee on Medical Economics of the Manitoba Medical Association, the plan was approved by the Executive of the Manitoba Medical Association and also by the Winnipeg Medical Society. The scheme went into effect on April 15th, 1940.

Two hundred and twenty-five doctors are taking part in the Service, of whom about seventy are specialists; the members of the Firefighters' Club are satisfied that the Manitoba Medical Association has lived up to its undertaking to give a wide choice of doctors. When the Associated Medical Services was instituted in Toronto, it was subsidised to the extent of five thousand dollars by the Ontario Medical Association. The Manitoba Medical Association has not been asked for any grant, nor is it likely that with its membership it could provide a sum of any such magnitude. No salaries or honorariums will be paid to any members of the administrative staff, and it is not proposed to make any deduction from doctors' pay cheques, as in the case of the Greater Winnipeg Medical Relief Scheme. It is always possible that the high incidence of illness during the winter months of the first year may make it necessary to appeal for funds to prevent hardship to practitioners who have given their services.

The initiation of the Firefighters' Medical Service has brought certain problems in its train. As was anticipated a good many cases of chronic diseases presented themselves; also conditions of long standing requiring surgical interference; in most of these it is probable that financial difficulties prevented treatment at an earlier date. Admission to the service subject to a previous medical examination and a clean bill of health would have defeated its object. It is hoped that these conditions will be cleared up in the first two or three months.

Meanwhile the members of the profession are co-operating whole-heartedly, and there have been no complaints from the Firefighters' Club.

—E. S. MOORHEAD.

Winnipeg Medical Society Executive

1940 - 1941

President	Dr. Digby Wheeler
Vice-President	Dr. J. C. Hossack
Secretary	Dr. C. B. Stewart
Treasurer	Dr. H. Medovy
Trustees	Dr. Dougal McIntyre Dr. A. Leishman Dr. Eyolfur Johnson

In Memoriam

DR. WILLIAM HARVEY SMITH

1868-1940

With the passing on May 15th of William Harvey Smith after a long, happy and helpful life, Canada lost one of its outstanding physicians. Though his achievements in his chosen field of ophthalmology were considerable, including highly successful practice, the publication of articles in various medical journals, and thirty-two years' service on the faculty of Manitoba Medical College, twenty-seven of these as professor and head of the department of ophthalmology in the Winnipeg General Hospital, his true genius lay in the fields of organization and medical statesmanship. As President of the British Medical Association and also of the Canadian Medical Association in 1930, President of the Manitoba Medical Association, the College of Physicians and Surgeons of Manitoba and the Winnipeg Medical Society, and Chairman of the Restoration Fund of the Anglican Church in Canada, he had opportunities to show his powers of organization and administration and he filled these positions not only with distinction but with brilliance. His concern for the unity and honour of the medical profession and his desire that it should exercise the greatest good to the greatest number of people led him to throw his whole weight into upholding the highest principles of medical ethics and into championing the cause of health insurance. This latter was the main theme of his presidential addresses at the Winnipeg Meeting of the British and Canadian Medical Associations in 1930 and at the Vancouver Meeting of the Canadian Medical Association in 1931.

His background fitted him well for the tasks he undertook. His forbears were of United Empire Loyalist stock who settled in Port Hope, Ontario; his grandfather, Hon. Sidney Smith, was pre-confederation postmaster-general, and his father, Henry Hall Smith, was a personal friend of Sir John A. Macdonald. Harvey Smith was born in Peterborough in 1868, and was educated there and at Trinity College School, Port Hope, and came to Winnipeg with his parents in 1885, when his father became Dominion Lands Commissioner. He attended St. John's College and Manitoba University, graduating in natural sciences in 1889. In McGill University, where he obtained his medical degrees in 1892, he was a close friend of Charles F. Martin, later dean of McGill Medical Faculty, of R. Tait MacKenzie, the sculptor, and later Professor of Physical Education in the University of Pennsylvania. These friendships were terminated only with death. His post-graduate education was obtained in the Montreal General Hospital, the Manhattan Eye and Ear Hospital, New York, and in London and Paris. In 1895 he began practice in Winnipeg and acted as eye surgeon to the Canadian Pacific Railway. In 1901 he married Annie Prince Galt, youngest daughter of the late Sir Alexander Galt, one of the Fathers of Confederation, and grand-daughter of John Galt, the Scottish novelist who was a leading figure in the Canada Company which founded the towns of Gault, Guelph and Goderich in Ontario. Mrs. Smith was ever a true helpmate and a charming hostess.

From the beginning of his career in Winnipeg he took a leading part in organized medicine, and positions of responsibility were thrust upon him, so that he came to occupy a unique place of trust among medical men. No other physician in Winnipeg could have brought his confrères with him into the task of establishing the Medical Arts Building, the first building in Canada to be erected, owned and controlled solely by doctors and dentists. The building was completed in 1923, and Smith remained a member of the directorate until 1935.

As the third Canadian to be President of the British Medical Association, he made many friends among British physicians, among them Lord Dawson of Penn, the late Lord Moynihan, Sir Henry Brackenbury, Sir Robert Bolam, Sir Ewen Maclean, Dr. C. O. Hawthorne, Mr. A. H. Burgess, Mr. N. Bishop Harman and Dr. Alfred Cox. He was greatly impressed with the insurance system established under the British Medical Health Insurance Act of 1911, and with the proposal of the Council of the British Medical Association to establish a general medical scheme for the nation. He was anxious that in Canada some scheme might be established whereby the benefits of medical skill might be made available through health insurance, preferably of the voluntary type, to all citizens of the Dominion.

Through his acquaintance with such leaders in the American Medical Association as Dr. William Gerry Morgan, the late Dr. E. Starr Judd, Dr. C. Jeff Miller, Dr. Morris Fishbein and Dr. Olin West and through his Fellowship in the American College of Surgeons he kept in close touch with economic and sociological trends in American medicine.

He received the degree of Doctor of Laws, honoris causa, both from the University of Manitoba and from McGill University. An ardent golfer, he was the first president of Pine Ridge Golf Club and cherished a trophy presented to him when he made a hole in one.

Though many of his friends knew that he turned out occasional verse, it is not generally known that he wrote a hymn marked by deep feeling which has been set to music by Mr. Hugh Bancroft, the organist of All Saints Church, Winnipeg.

One of the finest traits in his character was his encouragement of younger men. He organized the Pi Epsilon Chapter of the Zeta Psi fraternity, the first Greek letter fraternity in Manitoba University. He was quick to detect talent or ability and did not suffer the possessor of these qualities to hide his light under a bushel. Bred in an atmosphere of high traditions, he remained steadfastly true to them, and there was always about him something of the grand manner and an innate dignity. He could walk with kings and yet not lose the common touch.

Personal Notes and Social News

Conducted by Gerda Fremming, M.D.

It's a Boy—and to Dr. and Mrs. F. Hartley Smith we offer our congratulations on the birth of their first son, 10 pounds 9 ounces, May 25th, at St. Boniface Hospital.

♥ ♥ ♥

Dr. and Mrs. Kenneth Trueman are accepting congratulations on the birth of their first child, a son.

♥ ♥ ♥

Dr. and Mrs. M. M. MacPherson of Vancouver, B.C. (née Hester Quirk), a son, May 19th.

♥ ♥ ♥

The following medical officers with the fighting forces have left their homes and most of them are now overseas: H. M. Edmison, C. K. Bleeks, R. H. Cooper, N. L. Elvin, R. W. Richardson, G. H. Ryan, C. H. Walton, P. K. Tisdale, Lennox Arthur, H. L. McNichol, G. S. Williams, C. W. MacCharles, A. S. C. Rumball, A. R. Gordon, C. E. Corrigan, J. N. Crawford and S. A. Boyd.

♥ ♥ ♥

Dr. J. G. Whitteker, formerly of Glenboro, Man., has moved to Desoronto, Ont.

♥ ♥ ♥

Dr. W. L. Kurtze, formerly of St. Boniface hospital, is now located at Kirkland Lake, Ont.

♥ ♥ ♥

Dr. Robert Inglis is now located at Red Lake, Ont.

Drs. J. D. and J. J. Leishman are now located at Fort Frances, Ont.

♥ ♥ ♥

Dr. K. A. Peacock, formerly of Brandon, Man., has moved to Grandview, Man.

♥ ♥ ♥

Dr. R. L. Cook, recently of Winkler, Man., is now at Wolseley, Sask.

♥ ♥ ♥

Dr. C. W. Hall, formerly of Beausejour, Man., is now associated with Dr. A. W. Hogg of Winnipeg.

♥ ♥ ♥

Dr. A. Searle has moved from Erickson, Man., to Pine Falls, Man.

♥ ♥ ♥

Dr. John Swan will be located at Bissett, Man.

♥ ♥ ♥

Dr. Murray Campbell is now resident physician at Dynevor hospital, Selkirk, Man.

♥ ♥ ♥

Now that the fishing season is open, a fish story should be in order.

Dr. Cruise and Dr. McEwen became disciples of Isaac Walton recently. The story goes: Four little fish were caught (napping probably), but the whopper THAT GOT AWAY!!! PHEW!!! We are wondering if the combined length of the four fish caught equalled that of the monster who is still in the lake?

Contributions to This Column Invited

Under the title "Personal Notes and Social News" the Manitoba Medical Review will be pleased to publish each month personal interest notes, social activities, weddings, births, travels, sports and other news items pertaining to the Medical Profession of Manitoba and their families. Also of former Manitoba Members of the Profession and Graduates of the Faculty of Medicine practicing in other provinces and in distant lands.

This column will be conducted by Gerda Fremming, M.D. (Mrs. F. G. Allison). All contributions must be received at the editorial offices not later than the 15th of the month preceding date of issue.

In Metrorrhagia and Impotence



"A.P.L." - No. 500
500 I.U. per c.c.
In 5 and 10 c.c. vials

●
"A.P.L." - No. 488
100 I.U. per c.c.
In 10 c.c. vials

Physicians will find that "A.P.L." No. 500 provides a highly potent, standardized and economical preparation of chorionic gonadotrophin which, because of its extreme purity, is comparatively painless on injection. This product is especially valuable for the treatment of conditions such as metrorrhagia and impotence where high dosage is usually necessary.

When lower dosages of chorionic gonadotrophin are indicated, as in Fröhlich's syndrome, cryptorchidism, etc., "A.P.L." No. 488 (100 International Units per c.c.) is recommended.

Special literature available on request.



AYERST, MCKENNA & HARRISON LIMITED
Biological and Pharmaceutical Chemists

MONTREAL
905

CANADA

Department of Health and Public Welfare

NEWS ITEMS

The following is the second and last instalment of "Preventive Aspects of Cancer," the first appearing in the May, 1940, edition of the Manitoba Medical "Review."

PREVENTIVE ASPECTS OF CANCER

"THE FUNDAMENTAL CHANGE"

"All students of the cancer problem agree that the inciting agents bring about an intracellular change which is the process of importance. It constitutes the malignant change. Although it has become possible to induce this malignant change at will by an increasing number of carcinogenic agents, the nature of the malignant change still remains baffling. There is nothing which the microscopist can identify with certainty as the beginnings of this change. This change from an orderly pattern to one without regulation is self-perpetuating. All the cells descended from those showing the malignant change retain the same qualities. They almost invariably reproduce the same histologic structure and breed true to type. This has been observed in transplantable neoplasms which have been carried in experimental animals for 30 years. Factors which bear on the behavior of the cell under impact from the inciting agents may be biologic or chemical in nature. Thus it becomes necessary to take into consideration the effects of the hereditary constitution; the internal cell metabolism; changes in the chemical balance which influence cell growth; and the virus problem.

"Evidence that the hereditary constitution has a bearing on the cancer problem comes from several directions. Existing human cancer statistics and records have very little value because of many inherent errors. But the accurate study of cancerous families may be of value. This is especially true where a study is made of specific organ types of cancer in relation to families. And when families have a certain sort of tumor which is not common, the familial incidence becomes significant."

"Readers interested in studies of the bearing of the hereditary constitution on the incidence of cancer are referred to Dr. Morton's article in the October 1937 Annals of Surgery (*supra*), which also discusses certain genetic aspects. Dr. Morton also gives certain theories concerning the intracellular change that is cancer.

"Investigators have been interested in tissue stimulators and inhibitors as possible factors in the production and the control of neoplasms for several years. . . . A most extensive and elaborate work on these substances has been produced by Maisin and his co-workers. They demonstrated that practically every organ contained both growth-inhibiting and growth-promoting factors. They also showed that most growth-promoting substances were water-soluble and relatively insoluble in ether; whereas the inhibiting substances were ether-soluble but for the most part insoluble in acetone. They used tarred animals as test objects and the growth substances were fed to them in their diets. They proved that these growth substances can pass the stomach and intestinal mucosa without being destroyed."

"Having studied the review of Dr. Morton's work we shall attempt to adapt certain concepts derived from the experimental studies to our clinical work. If you are as ignorant as I was of the late developments I am sure you will feel that all of this work and expenditure of brain power should hasten the discovery of the true cause of cancer and that it cannot be too far distant. We have learned that chronic irritation and infection influence the formation of cancer. Until we learn the

cause of cancer we must direct all our energies against the precancerous lesions. We have all known clinical cases of breast tumor which have seemingly been benign for a number of years to suddenly develop growth characteristics and result in cancer. Had the benign growth been removed early the cancer probably would not have resulted. In our work on prevention of cancer we must encourage periodic health examinations.

"When a patient consults us as to whether or not cancer is present, how extensive should be our examination? The most common places where cancer may develop and where precancerous prophylaxis may be of aid are the skin, tongue and mouth, the thyroid gland, the breasts, the gastro-intestinal canal (including the esophagus, stomach, colon and rectum), the uterus, ovaries and testicles, and the kidneys, bladder and prostate. A general history should cover these various areas by questions propounded by the physician. Most persons are aware of their skin blemishes, and they should be asked if there are any such and a study made of these abnormalities. Cancer may develop in infected sebaceous cysts; it may develop in sweat glands; it may develop in moles. It has also occurred after neglected burns and osteomyelitic sinuses.

"Any chronic lesion that has persisted over a period of time should, if possible, be eliminated. Careful examination should be made of the oral cavity. Infected teeth or ill-fitting plates should be noted. Any sores on the lips, gums or tongue should be considered as pre-cancerous until proved otherwise in people within the cancer age. It is within the scope of every physician to examine the tonsils and pharynx and, with a laryngoscope mirror, to observe the vocal cords. Cancer is rare in the thyroid gland, and in at least 95 per cent of the cases of cancer of the thyroid gland it originates in local enlargements of the thyroid commonly called adenoma. One should not condemn every patient with an adenoma of the thyroid to surgery unless the patient has experienced increase in size, pain or consistency of the local adenoma.

"The breast probably presents the greatest difficulty to the examining physician. The tendency to constrict the breast by tight brassieres as called for by certain fashion modes has done a good deal to increase breast disorders.

"Volumes have been written on the etiology and treatment of cystic mastitis. It occurs in many forms, notably in breasts that contain numerous shot-like cysts and in breasts that contain rather large single cysts. Where the cysts are localized, local excision is probably of advantage, but where the breast is nodular throughout there is not sufficient proof that cancer is apt to occur to advise mastectomy. Patients with such conditions should report frequently for examination to their physicians so that they may determine if there is any change that might suggest approaching malignancy.

"Diathermy, massage and breast pumps have in some cases proven of advantage, but unfortunately many cases do not respond to this therapy. The nipple should be carefully inspected and patients advised to keep scabs off by the use of soap and water and ointments. Single discrete, firm nodules in the breast, such as are produced by fibroadenoma should, wherever possible, be locally excised.

"The study of the gastrointestinal tract is difficult and complex. Assuming that a careful examination of the abdomen is made and no tenderness or mass detected, are we justified in telling the patient that there is nothing wrong in his gastro intestinal tract or thorax? We cannot give this assurance without the

aid of the x-ray, and unfortunately a thorough gastro-intestinal study increases the economic strain on many a patient to a degree that he cannot afford. We must, as doctors, attempt to work out some plan with our radiological brothers which will be fair to the patient, to themselves and ourselves. It may be that a minimum fluoroscopic or film study can be made on routine cases not having gastrointestinal symptoms. Such a study would mean a very short gastric examination and an examination of the sigmoid and colon. It should be understood by the patient, the physician and the radiologist that should any abnormality be seen in such a study further studies would be made at an increased cost.

"A vaginal examination should include visual observation, by means of the speculum, of the cervix and vaginal canal. A digital rectal examination should be done on every patient coming for a periodic health examination, and if there be any symptoms of change in bowel function, blood or mucus in the stools a sigmoidoscopic examination should be made. The cost of a sigmoidoscope is not so great but what the average practicing physician can afford it. Examinations through a sigmoidoscope are not difficult and can be made with fair accuracy by any physician who practices with the sigmoidoscope a short time.

"A digital examination would reveal also the presence of prostatic hypertrophy. In most patients symptoms from new growths in the kidneys, bladder or prostate are so pronounced that the patient is apt to consult the physician about them of his own accord. Every routine examination should include, of course, an examination of the urine. If the microscopic examination reveals red or white blood cells in repeated specimens a study by a urologist of the kidneys, bladder and prostate, should be carefully made.

"To review our examinations of the patient, what should be our prophylactic advice?

"Jagged teeth should be removed, as they are a constant source of irritation to the surrounding mucous membrane and may produce carcinoma. Pyorrhcea should be referred for treatment. Leukoplakia or sores on the tongue should be carefully examined microscopically to preclude carcinoma. If these sores are due to smoking or errors in mouth hygiene the underlying cause should be removed. Long-persisting or firm adenomata of the thyroid are more safely referred to surgery than left untreated. Circumscribed breast tumors should be excised if clinically benign. A needle-cannula aspiration of a breast tumor and an examination by a capable pathologist of the tissue removed thereby may assure us of the diagnosis. Chronic indigestion and the causes thereof should be carefully studied by the examining doctor. Examination of the gastric meal, and examination of the stool and radiological studies should be made. Once the possibility of cancer has been ruled out, and having ascertained as far as possible the causes of indigestion, every attempt should be made, by dietary regime and general medical therapy, to aid the patient.

"In considering the rectum it is insufficient to ask a patient whether he has diarrhea or constipation. The patient may have a partial obstruction due to carcinoma and still have two or three stools a day, which he will state, when closely questioned, are not diarrhea but are insufficient bowel movements. Watery diarrhea may be present in carcinoma of the colon with partial obstruction, but the symptoms of gas and distress should lead one to investigate the case further by x-ray and careful physical examination. Hemorrhoids that have persisted for a considerable period of time and have not benefitted by diet and suppositories, and have been the cause of blood at stool, should be treated either by injection or excision.

"Women should be educated to consult their doctors when they have any irregular menstruation about the time of the menopause.

"Spotting between periods should call for a diagnostic curettage and examination under the microscope of the curettings.

"Erosions of the cervix, or Nabothian cysts, should in general be treated by the cautery method. This may be done in the office by either the endotherm knife or the cautery. It does not take long before the sloughing tissue separates and mucous membrane covers the surface in a normal manner.

"Smears should be taken of the vaginal and cervical secretions to exclude either venereal infection or Trichomonas vaginalis. Any persistent leucorrhea should be given adequate therapy in order to prevent chronic infection of the cervical canal.

"Recurring pyuria or hematuria must always be investigated by x-ray, cystoscope and intravenous pyelogram, according to the symptoms suggested by the patient.

"We must, by public education, instruct the layman that cancer in its early form does not cause pain. It is only when it presses on some nearby structure or nerve that pain results.

"No attempt can be made here to suggest the individual treatment of cancer when it has once developed, but it should be emphasized to the average doctor that the results of the treatment of cancer, while still a long way from ideal, are not as bad as one is led to believe. Any hospital with a good follow-up system can show many cases of 5 and 10-year cures of cancer of all of the regions of the body noted above.

"It behooves us as practicing physicians not only to eradicate precancerous lesions but to be eternally vigilant to make an early diagnosis of cancer and immediately initiate the appropriate treatment."

COMMUNICABLE DISEASES REPORTED Urban and Rural - March 26th to April 22nd

Measles: Total 2,516—Winnipeg 1,671, St. James 148, Kildonan East 125, Kildonan West 116, Harrison 63, St. Boniface 59, St. Vital 45, Bifrost 30, Brooklands 21, Eriksdale 20, Brandon 19, Morris Town 19, Rosser 13, Unorganized 16, Springfield 15, Flin Flon 13, Morris Rural 13, Fort Garry 11, St. Clements 7, Carman 6, North Norfolk 5, St. Andrews 5, Woodlands 5, Dufferin 4, Strathclair 3, Woodlea 3, Transcona 2, Siglunes 2, Neepawa 2, Odanah 2, Ritchot 2, Rockwood 2, Russell Town 2, Saskatchewan 2, Charleswood 1, Coldwell 1, Franklin 1, Gimli Village 1, Hamiota Village 1, Lansdowne 1, Lorne 1, MacDonald 1, Portage Rural 1, Selkirk 1, Thompson 1, Tuxedo 1 (Late Reported: Flin Flon 12, St. Boniface 5, North Norfolk 3, Brandon 1, Odanah 1, Portage City 1, St. James 1, Springfield 1, Unorganized 1, Westbourne 1).

Whooping Cough: Total 164—Winnipeg 43, St. Boniface 26, Portage City 16, Woodlea 7, Edward 6, Brandon 4, North Norfolk 3, Rosser 3, Roblin Rural 2, Rapid City 2, Neepawa 2, Brooklands 2, Arthur 2, Kildonan West 1, Saskatchewan 2 (Late Reported: Brandon 11, Rapid City 7, Portage City 5, Roblin Rural 5, Unorganized 5, Portage Rural 3, The Pas 2, Riverside 1, Blanchard 1, Saskatchewan 1).

Chickenpox: Total 134—Winnipeg 69, St. Boniface 11, Brandon 10, Unorganized 9, Silver Creek 5, The Pas 4, Hamiota Village 3, Montcalm 3, St. Vital 3, Transcona 2, Daly 2, Albert 1, Fort Garry 1, Grandview Town 1, Hamiota Rural 1, Kildonan West 1, Lorne 1, Rivers Town 1, St. Clements 1, St. James 1 (Late Reported: Portage Rural 2, Melita 1, Brandon 1).

Typhoid Fever: Total 68—St. Boniface 39, Winnipeg 6, Ste. Anne 5, Springfield 5, Brandon 1, Lorne 1, MacDonald 1, Montcalm 1, St. Vital 1 (Late Reported: St. Boniface 7, Rosedale 1).

Scarlet Fever: Total 64—Winnipeg 23, Mossey River 5, Montcalm 3, St. Vital 3, Tuxedo 3, Unorganized 3, Strathcona 2, Dauphin Town 2, Gilbert Plains Village 2, St. James 2, Gilbert Plains Rural 1, Kildonan West 1, Morton 1, North Norfolk 1, Rockwood 1, Russell Rural 1, St. Boniface 1, St. Paul West 1, Springfield 1, Wawanusa 1, Gladstone 1 (Late Reported: Unorganized 3, Russell Rural 1, St. Boniface 1).

Mumps: Total 53—Winnipeg 43, Kildonan East 4, St. Boniface 3, Oakland 2, Brenda 1.

Pneumonia (Lobar): Total 32—Unorganized 6, Ste. Rose Rural 4, Brandon 3, McCreary 3, Ochre River 2, Ste. Rose Village 1, Lansdowne 1 (Late Reported: Birtle 1, Brandon 2, De Salaberry 2, Roblin Rural 2, Glenwood 1, Lorne 1, Langford 1, Westbourne 1, St. Boniface 1).

Tuberculosis: Total 25—Winnipeg 5, Unorganized 5, Birtle Rural 2, Portage City 2, Dauphin Rural 1, Ethelbert 1, Glenwood 1, Kildonan East 1, Lac du Bonnet 1, Portage Rural 1, Rossburn 1, Ste. Rose Rural 1, Swan River Rural 1, Tache 1, The Pas 1, Treaty Indian Cases 2.

Diphtheria: Total 13—Hanover 4, Lac du Bonnet 2, Winnipeg 2, Unorganized 1, Swan River Rural 1, Franklin 1, Lorne 1 (Late Reported: Hanover 1).

Erysipelas: Total 10—Winnipeg 4, Arthur 1, Brandon 1, Charleswood 1, Kildonan West 1, Rockwood 1, St. James 1.

Influenza: Total 9—Brandon 1 (Late Reported: Franklin 1, Albert 1, Edward 1, Gimli Village 1, Minitonas 1, South Norfolk 1, Rosedale 1, Whitehead 1).

Diphtheria Carriers: Total 8—Winnipeg 5, Roblin Town 2, St. Francois Xavier 1.

Typhoid Fever Carriers: Total 2—Ste. Anne 2.

Septic Sore Throat: Total 2—Morris Town 1, Tuxedo 1.

German Measles: Total 1—Brandon 1.

Trachoma: Total 1—Rhineland 1.

Puerperal Fever: Total 1—Stanley 1.

Encephalitis: Total 1—Brandon 1.

Anterior Poliomyelitis: Total 1—Transcona 1.

Venereal Disease: Total 144—Gonorrhoea 98, Syphilis 46.

DEATHS FROM ALL CAUSES IN MANITOBA For the Month of March, 1940

URBAN—Cancer 39, Influenza 8, Pneumonia Lobar 3, Tuberculosis 5, Measles 3, Pneumonia (other forms) 5, Syphilis 3, Whooping Cough 1, Typhoid Fever 2, Poliomyelitis 1, all others under one year 13, all other causes 163, Stillbirths 14. Total 260.

RURAL—Cancer 22, Pneumonia 16, Influenza 16, Tuberculosis 12, Pneumonia Lobar 6, Syphilis 5, Whooping Cough 4, Cerebral Meningitis 1, all others under one year 15, all other causes 155, Stillbirths 21. Total 273.

INDIANS—Tuberculosis 7, Pneumonia (other forms) 6, Influenza 1, Whooping Cough 1, all others under one year 8, all other causes 7. Total 30.



POWER — *under control*

The high disinfecting power of Tincture Metaphen is not obtained at the expense of safety. Tincture Metaphen is nontoxic and relatively non-irritating to the unbroken skin. Other features also recommend Tincture Metaphen to the careful practitioner. It does not appreciably precipitate blood serum. It does not affect surgical instruments or rubber goods and is quite stable when exposed to air. Tincture Metaphen clearly delineates the field of application with a stain which is easily removed with soap and water. It is supplied in 1-oz., 4-oz., 16-oz. and 1-gallon bottles. Write today for a sample and literature. Abbott Laboratories Limited, 388 St. Paul St. West, Montreal.

ABBOTT'S TINCTURE METAPHEN

LABORATORY
POULENC FRERES
 OF CANADA LIMITED
 204 YOUVILLE SQUARE—MONTREAL
 The home of:
 NOVARSENOBENZOL BILLON
 STOVARSOL
 DAGENAN
 SONERYL
Detailed Literature Upon Request

Manitoba Nurses' Central Directory

214 Balmoral St. Phone 72 151
24 HOUR SERVICE
REGISTERED NURSES
NURSING ATTENDANTS
 Schedule of rates and hours on request.
 P. BROWNEILL, Reg. N.
 Registrar.

NEURO-TRASENTIN "Ciba"

(Trasentin + phenylethylbarbituric acid)

For the Treatment of
 NEURO-VEGETATIVE DISTURBANCES

A new "Ciba" product, which exhibits, according to the dose, a sedative-antispasmodic effect of a central and peripheral nature, or acts as a mild soporific.

Issued:
 Tablets, in bottles of 30 and 100
 also 500 for hospital use.

CIBA COMPANY LIMITED • Montreal

PHYSIOTHERAPY

by J. C. Swann
 Member of

THE CANADIAN PHYSIOTHERAPY ASSOCIATION
 (Incorporated by Dominion Charter)

Graduate of: Massage, Swedish Movements, Muscle Re-education and Medical Gymnast, 2 years training in Christie Street Hospital, Toronto, Masseur at Deer Lodge Hospital, Pensions and Health, Winnipeg, for the past 15 years. (Under Medical Supervision or Direction).

Phone 80 760 438 Somerset Bldg. Res. Phone after 1 p.m. 54 195
 Winnipeg, Man.

THE MARGARET SCOTT NURSING MISSION

Free Home Visiting Nursing
 in Greater Winnipeg

99 George Street Phone 96 839

DREWRYS

Estab. 1877

DRY GINGER ALE—a most inviting beverage for every period of sickness and convalescence.

Phone 57 221

THE DREWRYS LIMITED

Save Time and Trouble

Phone, Wire or Write
BRATHWAITES First
 for Up to the Minute
 Medical Products.

Sickroom and Office Supplies
 Biological Products
 Diabetic Foods and Confections

At Your Service
 Twenty-Four Hours Daily

BRATHWAITES LTD.

Portage at Vaughan
 WINNIPEG

Phone 21 085 Nights 30 338

MCLEAN PRINTERS

Printers of "The Review"
 Kelvin and Hart • WINNIPEG
 Phone 501 122

Doctor's Equipment for Sale

Consisting of a Complete Set of Surgical Instruments, Medical Books, One Electric Ether Machine. May be purchased in whole or part. Prices reasonable.

For detailed list, write Mrs. T. A. Cohoe, Pilot Mound, Man.



DILAXOL E.B.S.

Each fluid ounce of Dilaxol E.B.S. contains:

Bismuth Subsalicylate	- - - - -	4 grains
Digestive Enzymes	- - - - -	1 grain
Magnesium Trisilicate,		
Carbonate and Hydroxide	- - - - -	75 grains

Dilaxol is alkaline in reaction and, in contrast to the strong alkalis, does not stimulate the secretion of surplus acid; yet it will neutralize many times its volume of excess acid in the stomach. This unique property of Dilaxol is akin to the buffer action of the blood. Dilaxol neutralizes free acid and does not interfere with the natural digestive process, nor does it cause alkalosis.

Indicated in Dyspepsia, Duodenitis, Flatulence, Hyperacidity, Vomiting of Pregnancy and other gastro-intestinal disorders.

Palatable and Protective.

Also supplied in powder form. Sample on request.

THE E. B. SHUTTLEWORTH CHEMICAL CO. LIMITED
TORONTO MANUFACTURING CHEMISTS CANADA

S P E C I F Y E . B . S . O N Y O U R P R E S C R I P T I O N S

ANAHÆMIN B.D.H.

for

Economy of Treatment in Pernicious Anæmia

The following case report of a patient, a typical case of pernicious anæmia as used in the routine clinical testing of Anahæmin, demonstrates the effect produced by a single injection of only 1 c.c. of Anahæmin.

Initial counts: R.B.C. 1.76 millions, Hæmoglobin 42%, Colour Index 1.19, Reticulocytes 2.8%
Treatment, Injection 1 c.c. Anahæmin

5th day counts: R.B.C. 2.49 millions, Hæmoglobin 51%, Colour Index 1.03, Reticulocytes 17.4%

10th day counts: R.B.C. 2.64 millions, Hæmoglobin 60%, Colour Index 1.12, Reticulocytes 2.2%

15th day counts: R.B.C. 3.18 millions, Hæmoglobin 69%, Colour Index 1.08

The reticulocyte peak of 18% was reached on the 6th day.

One single injection 1 c.c. Anahæmin, acting over a period of 15 days, raised the red cell count from 1.76 to 3.18 millions, and the hæmoglobin percentage from 42 to 69.

Stocks of Anahæmin B.D.H. are held by leading druggists throughout the Dominion, and full particulars are obtainable from:

THE BRITISH DRUG HOUSES (CANADA) LTD.
Terminal Warehouse

Toronto 2, Ont.

An/Can/407



POWER — under control

The high disinfecting power of Tincture Metaphen is not obtained at the expense of safety. Tincture Metaphen is nontoxic and relatively non-irritating to the unbroken skin. Other features also recommend Tincture Metaphen to the careful practitioner. It does not appreciably precipitate blood serum. It does not affect surgical instruments or rubber goods and is quite stable when exposed to air. Tincture Metaphen clearly delineates the field of application with a stain which is easily removed with soap and water. It is supplied in 1-oz., 4-oz., 16-oz. and 1-gallon bottles. Write today for a sample and literature. Abbott Laboratories Limited, 388 St. Paul St. West, Montreal.

ABBOTT'S TINCTURE METAPHEN

Clinical Section

Long Standing Pyrexia Due to Hypernephroma

CASE REPORT

By

H. W. RILEY, M.D.
*Late Resident in Medicine
Winnipeg General Hospital*

Mrs. C., Hebrew, female, age 43.

First admitted to hospital August 29th, 1939.

Entrance Complaints.

1. Weakness and tiredness — 5 months, since February, 1939.
2. Night sweats — 5 months, since February, 1939.
3. Loss of weight, 15 lbs. — 5 months, since February, 1939.
4. Poor appetite — 5 months, since February, 1939.

Her symptoms commenced slowly and almost imperceptibly, and a week prior to admission she consulted a doctor, who told her she was running an afternoon temperature. A review of her systems was completely negative except for the symptoms mentioned. There were no respiratory or urinary symptoms.

Menstrual and marital histories were quite normal, and she had no significant previous illnesses. No tuberculous contacts.

Examination.

A pale, undernourished woman. Weight 101 lbs.

Heart and lungs clinically negative. Blood pressure 125/70.

Abdomen—A slightly irregular mass was palpated in the right upper quadrant. It was about the size of a kidney, freely moveable and could be ballotted between the hands. The examining fingers could be inserted between its upper pole and the costal margin. There was no pain or tenderness.

No enlarged lymph glands.

Neurological examination negative.

Pelvic and rectal examinations negative.

Laboratory Findings.

Urine—Repeatedly completely negative.

Blood—Haemoglobin 60%.

Red Cells 3.86 million.

Colour Index .78.

Leucocytes 9,600.

Differential normal.

Sedimentation 32 mm. in 1 hour.

Index 133.

X-ray Chest—Negative.

Tuberculin Test 1:1,000—Negative.

B.M.R.—10.

Stools—Repeatedly negative for occult blood.

Blood Culture—Negative on several occasions.

Agglutination Tests—Positive to 1/160 for Typhoid H.

Negative for Typhoid O, Paratyphoid and Undulant.

Skin Test for Undulant Fever—Negative.

Wassermann—Negative.

Spinal Fluid—Negative.

Intravenous Pyelogram—The right kidney, while functioning normally, appeared to be displaced downwards and rotated. The calyces had a peculiar appearance, attributed to external pressure.

Right Retrograde Pyelogram suggested ptosis of the kidney with dilatation of the major calyces and blunting of the minor, with a kink in the ureter at the uretero-pelvic junction. The possibility of a displacement by a retro-peritoneal tumour was suggested.

Catheterized specimens from the right ureter were negative and culture revealed no organisms.

Clinical Course.

From the day she entered hospital, the patient ran an intermittent temperature, having a consistent afternoon rise to 99 or 100. She developed no new symptoms, but her anorexia and weakness increased.

In conjunction with the Urological Department, it was decided that a right hypernephroma was a real possibility, and an exploratory operation was planned and slated. The patient, however, wished to go home for a few days and was discharged on September 20th, 1939, to return shortly for operation.

Readmitted January 21st, 1940.

Entrance Complaints.

1. Weakness and anorexia, as before, since February, 1939.

2. Further loss of weight, 18 lbs., since September, 1939.

3. Pain in Right Lower Quadrant, since January 16th, 1940.

Following her discharge in September, 1939, the patient went elsewhere, where she was investigated, and a laparotomy was finally performed. A subsequent report stated that the abdominal exploration was essentially negative except for—

1. The gall-bladder, which was found to be filled with stones, and which was removed.

2. A biopsy from the liver tissue which revealed cloudy swelling and the presence of intracellular bile pigment, and

* From the Departments of Medicine and Surgery, University of Manitoba, and The Winnipeg General Hospital.

3. By palpation the right kidney seemed ptosed and markedly rotated. There appeared to be a somewhat rounded area on the lower pole of the right kidney which the operator felt could not be interpreted as a tumour.

After her operation there was no change in the patient's subjective symptoms until 5 days prior to admission when she developed an aching pain in her right upper quadrant. This was not severe and was constant with no food or effort relationship. It did not radiate. Review of systems still negative.

Examination.

No change except for increased emaciation, and an upper right rectus scar. The mass in her upper right quadrant resembling a ptosed kidney, was still present but did not appear to be increased in size. It was slightly tender on pressure, and seemed a little irregular.

Laboratory Findings.

Blood—Haemoglobin 57%.

Leucocytes 12,000.

Differential normal.

Urine—Negative on numerous occasions.

Barium Series—Revealed nothing beyond a general ptosis.

X-ray Chest—Negative.

Cystoscopy—Negative.

Right Retrograde Pyelogram—Suggested a downwardly displaced and outwardly rotated kidney, presumably due to an extrinsic cause. This pyelogram was sent for comparison with the plates that were taken prior to her operation and the opinion was expressed that "this pyelogram demonstrates that there is no organic pathology in the kidney itself."

Duodenal Drainage—Negative.

Sternal Puncture—No abnormalities in haemopoiesis.

Clinical Course.

She continued to run a temperature rising to 100 or 101 daily.

By March 19th, 1940, her Haemoglobin had dropped to 53%, with a colour index of .7. Her general condition was unimproved. After considerable discussion, at which a variety of opinions were expressed, it was decided to proceed with an exploration of the right kidney.

The patient was transfused and operation performed on March 26th, 1940. The right kidney was exposed retro-peritoneally and was found to be rotated markedly. There were many large veins on the surface and attached to its anterior surface, just below the centre, was a round raised tumour, almost two inches in diameter. The kidney was removed. The cut surface of the tumour was smooth and pink at the periphery and necrotic in the centre. There appeared to be

no involvement of the renal pelvis, but the renal vein was markedly infiltrated. Microscopic examination revealed a typical hypernephroma.

The patient made a good post-operative recovery. Her temperature reached normal on her fifth post-operative day and remained normal until her discharge from hospital on April 17th, 1940. X-ray chest on April 15th, 1940, showed no evidence of metastases.

Follow-up.

May 15th, 1940. Patient felt much better following her operation and gained 10 lbs. Her temperature was normal. On May 10th, 1940, she developed a pain in her lower left chest, aggravated by breathing. No other complaints.

X-ray Chest—May 17th, 1940. There is a homogenous density in the left base with obliteration of the costo-phrenic angle. This change is presumably of metastatic origin.

Summary.

A case of Hypernephroma is reported in which the only symptoms for nearly a year were progressive anorexia and loss of weight, accompanied by an intermittent fever. The diagnosis was rendered difficult because of the lack of characteristic radiological findings, and because the possibility of a renal tumour had been rendered less likely by an apparently negative abdominal exploration performed six months after the onset of symptoms. Although the tumour did not invade the renal pelvis, and there were at no time any urinary symptoms, the significance of the involvement of the renal vein is demonstrated by the development of a pleural effusion a month after the operation, in spite of a marked improvement in her general health. The frequent association of pyrexia with an area of necrosis in a hypernephroma is again noted, though the significance of this association is still sub judice.

A Post Anesthetic Report Upon General Surgery For One Year at the Winnipeg General Hospital

by D. C. Aikenhead, M.D. (Man.)

The following survey is a "follow-up" of 3,549 surgical operations performed at the Winnipeg General Hospital from August 28th, 1938, to a similar date in August, 1939. During this period there were some 800 very short operations in which an inhalation anaesthetic was used and these are not included in this survey. It might be noted that the average time for these 3,549 operations was fifty-nine minutes.

These operations include a wide variety of surgical risks. The range in age was from an infant three days old to an elderly man of ninety-two years. The types of operations included many perforated duodenal ulcers, ruptured appendices, strangulated herniae, ectopic pregnancies and cerebral tumors with high intra cerebral pressure. Almost all types of patients are met in a busy surgical service within a year's time.

Mortality. There were seventy-one deaths in 3,549 operations, giving a mortality of two per cent. These deaths all occurred in hospital. One fatality was two and one-half months following surgery. No attempt was made to keep track of a patient after leaving hospital.

Anesthesia. 2,132 patients or forty-nine per cent. had ether by semi-closed method. Ether is an excellent anaesthetic agent and probably the safest inhalation drug we possess.

Gas. 1,316 patients or twenty-nine and one-half per cent. had gas anesthesia. Of this figure, ninety-five per cent. would be cyclo-propane. We are very fond of cyclo-propane and use it whenever possible in inhalation anesthesia unless profound muscular relaxation is desired. Any patient who shows cardiac irregularities or a persistent rise over normal blood pressure with the higher concentrations of cyclo-propane is switched to some other anaesthetic agent. These cases are very few in number.

Spinal. 801 operations were performed under sub-arachnoid block or "spinal anesthesia" giving a percentage of 18½%. The year 1939-40 will show a higher percentage of "spinals" for abdominal surgery. Muscular relaxation in abdominal surgery is more satisfactory to the surgeon under "spinal" than inhalation anesthesia. Post-operative morbidity and mortality of "spinal" and inhalation anesthesia is about the same following operations of equal gravity.

Avertin or Tribromethanal. This rectal anesthetic is the anesthetic of choice in cranial surgery.

Pentothal or Thithal. This is a very satisfactory intravenous anesthetic for any non abdominal operation under a half hour's time.

There is no "best" anesthetic. With the many excellent anaesthetic agents available, at present the use of one, or more than one agent to fit the patient's condition would seem to be the ideal.

Patients suffering from pulmonary tuberculosis requiring surgery do better with infiltration, spinal, or intravenous anesthesia rather than inhalation anesthesia. One may combine the former three types of anesthesia upon one patient if required.

Patients with a history of migraine or any severe irregular or periodic headache or a definite cerebro-spinal lesion should not have a "spinal" anesthetic.

Pulmonary Morbidity. Respiratory Major refers to a broncho-pneumonia or frank pneumonia. Respiratory Minor points out a post-operative atelectasis. This condition may lead to a Major pulmonary lesion but as a rule subsides within four days.

Post-Operative Catheterisations. Patients who had appendectomies and herniotomies under

"spinal" were catheterised more frequently than similar operations under inhalation anesthesia. In percentage the figures are as follows, "spinal" 41% and inhalation anesthesia 27%.

Intra-Tracheal Tubes. The use of intra-tracheal tubes in inhalation anesthesia with certain resistant patients changes a difficult anesthetic to one under full control of the anesthetist, plus markedly improved muscular relaxation for the surgeon. In a series of over 300 abdominal operations with intra-tracheal tubes the pulmonary morbidity was neither above or below the average. We think that the benefit of an intra-tracheal tube greatly outweighs the possible risk of its use.

In addition to pulmonary complications the following incidents should be noted: (a) Three "sore eyes"—which caused more discomfort to the patient than did the original operation.

- (b) One severe reaction to morphin with a good recovery.
- (c) Three patients had hiccoughs for over twenty-four hours.
- (d) One patient had marked mental aberration for 24 hours.
- (e) Eight patients had a "heart attack" at varying periods following their operation. These attacks without mortality lasted from a few minutes to three hours. Pallor, drop in blood pressure, and mental anxiety were the chief symptoms.
- (f) Four patients abdominal wound "broke open." These wounds were resutured without further trouble.
- (g) Pains in the legs following spinal anesthesia. Six patients come under this headings; four were punch prostatectomies.
- (h) Surgery during pregnancy. Three patients had resection of the thyroid gland and five patients had their appendix removed. None of these operations interfered with the normal course of pregnancy.
- (i) Gastric surgery—The eighty-one stomach operations included eleven gastric resections all over two hours in length and ten gastric perforations with two deaths.

"Comparisons are odious." It is difficult to get a series of surgical operations where the conditions of surgery are identical. It would seem to me looking backward over a period of twenty years that while mortality figures are not improving in a startling way, the gravity and age limit of surgery has been markedly stepped up within this period. At present heavy operations upon aged people are not exceptional. In this series the combined ages of three patients was two hundred and sixty-two years.

Two factors that have changed the post-operative morbidity and mortality in surgery are the use of pure Carbon Dioxide and "Nasal Suction." The former used at least three times per day to produce a brief hyperpnoea reduces the danger of atelectasis following surgery. The use of "Nasal Suction" following heavy abdominal operations would seem to me to be the greatest single surgical advance in the past twenty years.

I wish to express my appreciation to various house doctors for help rendered during the year. To Dr. Donald Huggins who spent considerable time in collecting material for this survey and valuable aid in compilation of end results I would also tender my hearty thanks. Finally, all sins of omission and commission are my own.

TRY PABLUM ON YOUR VACATION

Vacations are too often a vacation from protective foods. For optimum benefits a vacation should furnish optimum nutrition as well as relaxation, yet actually this is the time when many persons go on a spree of refined carbohydrates. Pablum is a food that "goes good" on camping trips and at the same time supplies an abundance of calcium, phosphorous, iron, and vitamins B and G. It can be prepared in a minute, *without cooking*, as a breakfast dish or used as a flour to increase the mineral and vitamin values of soups and standard staple recipes. Packed dry, Pablum is

Type of Operation	Total Cases	Average Time	Cathartisation	Number of Intra T. Tubes Used	Percentage of Intra T. Tubes	Deaths	Resp. Major	Resp. Minor	Percentage of Deaths
Hysterectomy	120	79mns.	.52	39	32%	1	1	2	.8%
Gall Bladder	168	70.5	.30	74	44%	7	4	2	4%
"Punch" Prostat	145	50				6	1	2	4%
Thyroid Surg.	238	41	.012	6	.02	3	1	3	1.2%
Intestinal	98	73mns.	.24	12	12%	12	2	2	12%
Stomach	81	77	.38	25	30%	7	1	3	8%
Kidney	63	71	.23	1	.014	3	2	1	4%
Abd. Perineal	7	116		1	.14	1			14%
Head and Neck	100	56		9	.9%	2			2%
Herniae	190	61	.32	5	.02				
Craniotomy	67	114		12	.17	6			8.9%
Appendectomy	494	44	.24	20	.04	5	3	4	1%
Haemorrhoids	182	40	.38	1	.005				
Breast	111	59mns.	.03	1	.009				
Other Pelvic	148	60mns.	.42	31	.20	1	1	2	.6%
Lap-Vag.	142	95		18	.12	1		3	.7%
Cervix-Uter.	293	41		2	.006	2		4	6%
Caes. Section	23	64	.26						
Limbs	566	48	.03	15	.026	4		4	.7%
Miscellaneous	313	47	6	35	.11	10	2	5	3%
Total Operations	3549			307		71			2%

light to carry, requires no refrigeration. The new half-pound package is convenient while travelling.

If personally interested, write for a free package to Mead Johnson & Company, Evansville, Indiana, U.S.A. —Adv.

PRACTICE FOR SALE

Dr. Robt. Inglis, Gunnar Gold Mines, Beresford Lake, is anxious to find a successor for his three hundred dollar a month practice as soon as possible.

Further details can be obtained from Dr. Inglis by long distance phone.

FOR SATISFACTORY RESULTS IN INFANT FEEDING

These pure Corn Syrups have been widely used for infant feeding for years and have proved to be safe and satisfactory carbo-hydrate for the purpose.

They may be used as an addition to any milk formulae, with excellent results.

Furthermore, they are readily obtainable in any grocery store, are easily mixed and are more economical.

Produced under the most hygienic conditions by the oldest manufacturers of Corn Syrups in Canada, you can recommend them with confidence in their purity and high quality.

EDWARDSBURG

"CROWN BRAND" CORN SYRUP
and "LILY WHITE" CORN SYRUP

Manufactured by THE CANADA STARCH COMPANY Limited
Montreal and Toronto



FOR THE MEDICAL PROFESSION

A convenient pocket calculator, with varied infant feeding formulae employing these two famous corn syrups, and a scientific treatise in book form for infant feeding, also prescription pads, are available on request. Kindly clip the coupon and this useful material will be mailed to you immediately.

THE CANADA STARCH CO. Limited
Montreal

- Please send me
 FEEDING CALCULATOR.
 Book "CORN SYRUPS FOR INFANT FEEDING."
 PRESCRIPTION PADS.
 Book "THE EXPECTANT MOTHER."
 Book "DEXTROSOL."

Name.....

Address.....



*in less virulent types of
Hemolytic Streptococcus Infections*

NEOPRONTOSIL

Trademark Reg. U. S. Pat. Off. & Canada

Brand of AZOSULFAMIDE

Disodium 4-sulfamido-phenyl-2-azo-7-acetyl-
amino-1-hydroxynaphthalene 3,6-disulfonate

HOW SUPPLIED: For parenteral administration: Neoprontosil 2.5 per cent solution, ampules of 5 cc., boxes of 5 and 50; ampules of 10 cc., boxes of 5; bottles of 50 cc. with rubber diaphragm stopper.

Neoprontosil 5 per cent solution, ampules of 5 cc., boxes of 5 and 50; bottles of 50 cc. with rubber diaphragm stopper.

For oral use only: Neoprontosil tablets of 5 grains, bottles of 50 and 500.

Neoprontosil capsules of 3 grains, bottles of 50.

WINTHROP CHEMICAL COMPANY, INC.

Pharmaceuticals of merit for the physician

Office and factory: WINDSOR, ONT.

Professional service office: Dominion Square Building, Montreal, Que.

Endocrine Therapy

AMNIOTIN (N. N. R.)—Squibb estrogenic substance.

The established indications for this A.M.A. Council-accepted product are vasomotor symptoms of the natural or artificial menopause; gonorrhreal vaginitis in children; senile vaginitis. There are also other conditions where its value is under investigation.

Amniotin is a highly purified preparation of naturally occurring estrogenic substances, derived from natural sources. It is available in oil in ampules, in pessaries, in capsules; for administration hypodermically, intravaginally, or orally; according to the condition being treated and the individual patient.

ANTERIOR PITUITARY EXTRACT SQUIBB is indicated for its growth-promoting effect in pituitary types of dwarfism, in diabetic children where there is pronounced failure of growth, and in Simmond's disease.

Anterior Pituitary Extract Squibb is available in 20 c.c. vials, each containing 200 growth units, for intramuscular injection.

FOLLUTEIN (chorionic gonadotropin)—anterior pituitary-like sex hormone Squibb.

In cases of undescended testes, satisfactory results have been obtained through the use of Follutein.

Follutein is supplied in glycerin solution with sterile distilled water diluent; mixture 5 c.c.—500 International Units; 10 c.c.—1,000 I.U.; 5 c.c.—5,000 I.U. Administered by intramuscular injection.

THYROID SQUIBB—thyroid glands dessicated. The product is standardized with respect to its iodine content, and also biologically assayed to assure specific therapeutic activity.

These Squibb Thyroid Tablets enable accurate and controlled dosage in hypothyroid states, including subnormal metabolism as in myxedema and cretinism, mental retardation associated with thyroid deficiency, some cases of obesity and of gonadal insufficiency in women.

Thyroid Squibb is supplied in plain or enteric-coated tablets, 1/10, 1/4, 1/2, 1, 2, and 3 grains, in bottles of 100, 1,000, 5,000. Also 5-grain tablets enteric-coated.

For further information write 36 Caledonia Rd., Toronto.

E.R.SQUIBB & SONS OF CANADA, Ltd.
MANUFACTURING CHEMISTS TO THE MEDICAL PROFESSION SINCE 1858